



## Senate

General Assembly

**File No. 273**

February Session, 2002

Substitute Senate Bill No. 341

*Senate, April 3, 2002*

The Committee on Government Administration and Elections reported through SEN. FONFARA of the 1st Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

### **AN ACT CONCERNING ENERGY EFFICIENCY.**

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. Section 16a-38 of the general statutes is repealed and the  
2 following is substituted in lieu thereof (*Effective July 1, 2002*):

3 (a) As used in this section, subsection (e) of section 4b-23, sections  
4 16a-38a and 16a-38b, unless the context otherwise requires: (1) "Major  
5 capital project" means the construction or renovation of a major  
6 facility; (2) "major facility" means any building owned by the state or  
7 constructed or renovated wholly or partly with state funds, including a  
8 state-financed housing project, which is used or intended to be used as  
9 a school or which has ten thousand or more gross square feet, or any  
10 other building so owned, constructed or renovated which is  
11 designated a major facility by the Commissioner of Public Works; (3)  
12 "renovation" means additions, alterations or repairs to a major facility  
13 which the Commissioner of Public Works finds will have a substantial

14 effect upon the energy consumption of the facility; (4) "life-cycle cost"  
15 means the cost, as determined by the methodology identified in the  
16 National Institute of Standards and Technology's special publication  
17 544 and interagency report 80-2040, available as set forth in the Code of  
18 Federal Regulations, Title 15, Part 230, of a major facility including the  
19 initial cost of its construction or renovation, the marginal cost of future  
20 energy capacity, the cost of the energy consumed by the facility over  
21 its expected useful life or, in the case of a leased facility, over the  
22 remaining term of the lease, and the cost of operating and maintaining  
23 the facility as such cost affects energy consumption; (5) "energy  
24 performance standard" means a rate of energy consumption which is  
25 the minimum practically achievable, on a life-cycle cost basis, by  
26 adjusting maintenance or operating procedures, modifying a  
27 building's equipment or structure and utilizing renewable sources of  
28 energy; (6) "energy audit" means an evaluation of, recommendations  
29 for and improvements of the energy consumption characteristics of all  
30 passive, active and operational energy systems and components by  
31 demand and type of energy used including the internal energy load  
32 imposed on a building by its occupants, equipment and components,  
33 and the external energy load imposed on a building by the climatic  
34 conditions at its location; (7) "renewable sources of energy" means  
35 energy from direct solar radiation, wind, water, geothermal sources,  
36 wood and other forms of biomass; (8) "cost effective" means that  
37 savings exceed cost over a ten-year period; (9) "state agency" means  
38 any department, board, commission, institution, or other agency of this  
39 state; and (10) "covered products" means the consumer products set  
40 forth as covered products in the Energy Policy and Conservation Act,  
41 42 USC 6292.

42 (b) (1) Except as provided in subsection (f) of this section, the  
43 Commissioner of Public Works and the Secretary of the Office of  
44 Policy and Management shall jointly establish and publish standards  
45 for life-cycle cost analyses required by this section for buildings owned  
46 or leased by the state. Such life-cycle cost analyses for buildings shall  
47 provide, but shall not be limited to, information on the estimated  
48 initial cost of each energy-consuming system being compared and

49 evaluated, annual operating and maintenance costs of all energy-  
50 consuming systems over the useful life of the building, cost of energy,  
51 salvage value and the estimated replacement cost for each energy-  
52 consuming system or component expressed in annual terms for the  
53 useful life of the building.

54 (2) Except as provided in subsection (f) of this section, the  
55 Commissioner of Administrative Services and the Secretary of the  
56 Office of Policy and Management may jointly establish and publish  
57 standards for life-cycle cost analyses required by this section for  
58 equipment and appliances owned or leased by the state which are not  
59 covered products, and for such equipment and appliances which are  
60 covered products. In establishing such standards, the commissioner  
61 and secretary shall consider the criteria set forth in subsection (j) of this  
62 section.

63 (c) No state agency shall obtain preliminary design approval for a  
64 major capital project unless the Commissioner of Public Works makes  
65 a written determination that the design is cost effective on a life-cycle  
66 cost basis. To make such a determination, the commissioner (1) shall  
67 require documentation that the design meets or exceeds the standards  
68 set forth in the National Bureau of Standards Handbook 135, or  
69 subsequent corresponding handbook of the United States Department  
70 of Commerce and the State Building Code, and (2) may require  
71 additional documentation, including, but not limited to, a life-cycle  
72 cost analysis that complies with the standards established pursuant to  
73 subdivision (1) of subsection (b) of this section.

74 (d) All design proposals for major capital projects shall include at  
75 least two differing energy systems for space heating, cooling and hot  
76 water to supplement the passive features designed into the building.  
77 Such proposals may include computer or other analytical modeling or  
78 simulation but shall not be construed to require the development of  
79 architectural or mechanical design plans for each such system. All cost  
80 evaluations of the competing energy systems shall be based on life-  
81 cycle costs. A life-cycle cost analysis for each competing energy system

82 determined by the Commissioner of Public Works to meet the  
83 standards of subsection (b) of this section shall be included as part of  
84 the design proposal for all projects. No major capital project shall be  
85 approved by the Commissioner of Public Works or by the State  
86 Properties Review Board pursuant to section 4b-23, after June 30, 1980,  
87 unless the proposed project achieves to the maximum extent  
88 practicable the energy performance standards established in  
89 accordance with subsection (b) or (g) of this section.

90 (e) All applications for state funding of major capital projects shall  
91 be accompanied by a life-cycle cost analysis which the Commissioner  
92 of Public Works has determined complies with the standards  
93 established pursuant to subsection (b) of this section. The  
94 Commissioner of Public Works or the Secretary of the Office of Policy  
95 and Management may require such a life-cycle cost analysis for  
96 projects other than major capital projects.

97 (f) The Commissioner of Economic and Community Development  
98 and the Secretary of the Office of Policy and Management shall jointly  
99 establish and publish energy performance standards for buildings  
100 constructed as part of state-owned and state-financed housing projects  
101 and establish standards for life-cycle cost analyses for such projects. In  
102 establishing such standards, the commissioner and secretary shall  
103 require all projects to meet or exceed all aspects of the Silver  
104 Leadership in Energy and Environmental Design's Rating System for  
105 New Construction building rating, as established by the United States  
106 Green Building Council, as revised from time to time and consider (1)  
107 the coordination, positioning and solar orientation of the project on its  
108 situs, (2) the amount of glazing, degree of sun shading and direction of  
109 exposure, (3) the levels of insulation incorporated into the design, (4)  
110 the variable occupancy and operating conditions of the facility, (5) all  
111 architectural features which affect energy consumption, and (6) the  
112 design and location of all heating, cooling, hot water and electrical  
113 systems.

114 (g) Notwithstanding any provision in this section concerning the

115 review of life-cycle cost analyses by the Commissioner of Public  
116 Works, a life-cycle cost analysis of a major capital project prepared for  
117 the Department of Housing shall be reviewed by the Commissioner of  
118 Economic and Community Development and the Secretary of the  
119 Office of Policy and Management to determine if such analysis is in  
120 compliance with the life-cycle cost analyses standards established for  
121 such project under subsection (f) of this section.

122 (h) Each state agency preparing a life-cycle cost analysis under this  
123 section shall submit a summary of the analysis to the Secretary of the  
124 Office of Policy and Management.

125 (i) Except as provided in subsection (f) of this section, the  
126 Commissioner of Public Works and the Secretary of the Office of  
127 Policy and Management shall jointly establish and publish energy  
128 performance standards for existing and new buildings owned or  
129 leased by the state. Such standards shall require maximum efficiency  
130 in energy use in all such buildings and maximum practicable use of  
131 renewable sources of energy in all such buildings provided the benefits  
132 of achieving such efficiency outweigh the costs, as determined by the  
133 commissioner and the secretary. In establishing such standards, the  
134 commissioner and secretary shall require all projects to meet or exceed  
135 all aspects of the Silver Leadership in Energy and Environmental  
136 Design's Rating System for New Construction building rating, as  
137 established by the United States Green Building Council, as revised  
138 from time to time, or a similar standard adopted by the commissioner  
139 and secretary in accordance with chapter 54 and consider (1) the  
140 coordination, positioning and solar orientation of the project on its  
141 situs, (2) the amount of glazing, degree of sun shading and direction of  
142 exposure, (3) the levels of insulation incorporated into the design, (4)  
143 the variable occupancy and operating conditions of the facility, (5) all  
144 architectural features which affect energy consumption, and (6) the  
145 design and location of all heating, cooling, hot water and electrical  
146 systems.

147 (j) Except as provided in subsection (f) of this section, the

148 Commissioner of Administrative Services and the Secretary of the  
149 Office of Policy and Management may jointly establish and publish  
150 energy performance standards for equipment and appliances owned  
151 or leased by the state which are not covered products, and for such  
152 equipment and appliances which are covered products. Any such  
153 standards shall require maximum energy efficiency for all such  
154 equipment and appliances and, for equipment and appliances owned  
155 or leased by the state which are covered products, shall be more  
156 stringent than the corresponding federal energy conservation  
157 standards set forth in the Energy Policy and Conservation Act, 42 USC  
158 6295, or federal regulations adopted thereunder. In establishing such  
159 standards, the commissioner and secretary shall consider, without  
160 limitation, (1) the initial cost of the equipment or appliance, (2) the  
161 projected useful lifetime of the equipment or appliance, (3) the  
162 projected cost of the energy that the equipment or appliance will  
163 consume over its projected useful lifetime, (4) the estimated operating  
164 costs for maintenance and repair, over the projected useful lifetime of  
165 the equipment or appliance, and (5) the positive or negative salvage  
166 value of the equipment or appliance upon disposal at the conclusion of  
167 its projected useful lifetime.

168 (k) Any life-cycle cost analysis standards established pursuant to  
169 subdivision (2) of subsection (b) of this section and any energy  
170 performance standards established pursuant to subsection (j) of this  
171 section shall be implemented in accordance with the purchasing  
172 requirements set forth in chapter 58, and any regulations adopted  
173 thereunder, and the provisions of this section and section 16a-38j.

174 Sec. 2. Section 16a-48 of the general statutes is repealed and the  
175 following is substituted in lieu thereof (*Effective July 1, 2002*):

176 (a) As used in this section:

177 (1) "Commissioner" means the Commissioner of Consumer  
178 Protection;

179 (2) "Fluorescent lamp ballast" or "ballast" means a device designed

180 to operate fluorescent lamps by providing a starting voltage and  
181 current and limiting the current during normal operation, but does not  
182 include such devices that have a dimming capability or are intended  
183 for use in ambient temperatures of zero degrees Fahrenheit or less or  
184 have a power factor of less than sixty-one hundredths for a single  
185 F40T12 lamp;

186 (3) "F40T12 lamp" means a tubular fluorescent lamp that is a  
187 nominal forty-watt lamp, with a forty-eight-inch tube length and one  
188 and one-half inches in diameter;

189 (4) "F96T12 lamp" means a tubular fluorescent lamp that is a  
190 nominal seventy-five-watt lamp with a ninety-six-inch tube length and  
191 one and one-half inches in diameter;

192 (5) "Luminaire" means a complete lighting unit consisting of a  
193 fluorescent lamp, or lamps, together with parts designed to distribute  
194 the light, to position and protect such lamps, and to connect such  
195 lamps to the power supply;

196 (6) ["New appliance"] "New product" means [an appliance] a  
197 product that is sold, offered for sale, or installed for the first time and  
198 specifically includes floor models and demonstration units;

199 (7) "Secretary" means the Secretary of the Office of Policy and  
200 Management;

201 (8) "State Building Code" means the building code adopted  
202 pursuant to section 29-252;

203 (9) "Torchiere lighting fixture" means a portable electric lighting  
204 fixture with a reflector bowl giving light directed upward so as to give  
205 indirect illumination;

206 (10) "Unit heater" means a self-contained fan-type heater designed  
207 to be installed within the heated space. Unit heaters include an  
208 apparatus or appliance to supply heat, and a fan for circulating air  
209 over a heat exchange surface, all enclosed in a common casing. Unit

210 heaters do not include "warm air furnaces", as defined in the federal  
211 Energy Policy Act of 1992;

212 (11) "Transformer" means a device consisting of two or more coils of  
213 insulated wire that transfers alternating current by electromagnetic  
214 induction from one coil to another in order to change the original  
215 voltage or current value;

216 (12) "Low-voltage dry-type transformer" means a transformer that:  
217 (A) Has an input voltage of 600 volts or less; (B) is air-cooled; and (C)  
218 does not use oil as a coolant;

219 (13) "Refrigerated beverage vending machine" means a machine that  
220 cools bottled or canned beverages and dispenses them upon payment;

221 (14) "Traffic signal" means a device consisting of a set of signal lights  
222 operating in sequence and placed at intersections to regulate traffic;

223 (15) "Traffic signal module" means a standard eight-inch or twelve-  
224 inch round traffic signal indication consisting of a light source, lens  
225 and all parts necessary for operation and communicates movement  
226 messages to drivers through red, amber and green colors;

227 (16) "Illuminated exit sign" means an internally illuminated sign that  
228 is designed to be permanently fixed in place and used to identify an  
229 exit. A light source illuminates the sign or letters from within, and the  
230 background of the exit sign is not transparent;

231 (17) "Automatic commercial ice-maker" means a factory-made  
232 assembly, not necessarily shipped in one package, consisting of a  
233 condensing unit and ice-making section operating as an integrated  
234 unit, with means for making and harvesting ice. It may also include  
235 means for storing or dispensing ice, or both;

236 (18) "Packaged air-conditioning equipment" means air-conditioning  
237 equipment that is built as a package and shipped as a whole to end-  
238 user sites;



239     (19) "Large packaged air-conditioning equipment" means packaged  
240     air-conditioning equipment with over twenty tons of cooling capacity;

241     (20) "Set-top box" means a commercially available electronic  
242     product whose purpose is to receive, send, process, translate or record  
243     signals that are then sent to a television or similar display device for  
244     viewing or to a computer for processing;

245     (21) "Commercial clothes washer" means a soft mount front-loading  
246     or soft mount top-loading clothes washer that is designed for use in  
247     (A) applications where the occupants of more than one household will  
248     be using it, such as in multi-family housing common areas and coin  
249     laundries; or (B) other commercial applications, if the clothes container  
250     compartment is no greater than 3.5 cubic feet for horizontal-axis  
251     clothes washers, or no greater than 4.0 cubic feet for vertical-axis  
252     clothes washers.

253     (b) The provisions of this section apply to the testing, certification  
254     and enforcement of efficiency standards for the following types of new  
255     [appliances] products sold, offered for sale or installed in the state: (1)  
256     Fluorescent ballasts for F40T12 and F96T12 lamps; (2) luminaires with  
257     fluorescent ballasts for F40T12 and F96T12 lamps; (3) showerheads; (4)  
258     torchiere lighting fixtures; (5) unit heaters; (6) low-voltage dry-type  
259     transformers; (7) refrigerated beverage vending machines; (8) traffic  
260     signal modules; (9) illuminated exit signs; (10) automatic commercial  
261     ice-makers; (11) large packaged air-conditioning equipment; (12) set-  
262     top boxes; (13) commercial clothes washers; and (14) any other  
263     products as may be designated by the commissioner in accordance  
264     with subsection (f) of this section.

265     (c) The provisions of this section do not apply to (1) new  
266     [appliances] products manufactured in the state and sold outside the  
267     state, (2) new [appliances] products manufactured outside the state  
268     and sold at wholesale inside the state for final retail sale and  
269     installation outside the state, (3) [appliances] products installed in  
270     mobile manufactured homes at the time of construction, or (4)  
271     [appliances] products designed expressly for installation and use in

272 recreational vehicles.

273 (d) Not later than July 1, [1988] 2003, the secretary, in consultation  
274 with the commissioner, shall adopt regulations, in accordance with the  
275 provisions of chapter 54, establishing minimum energy efficiency  
276 standards for the types of new [appliances] products set forth in  
277 subsection (b) of this section. The regulations [may provide such  
278 efficiency standards for various categories and types of such new  
279 appliances as the secretary shall determine and may establish new or  
280 increased efficiency standards to become effective on and after January  
281 1, 1990] shall provide that a commercial unit heater shall not have pilot  
282 lights and shall have either power venting or an automatic flue and  
283 shall, at a minimum, establish efficiency standards that are not less  
284 stringent than the efficiency standards set forth as of January 1, 2002,  
285 by the following programs, as applicable: The United States  
286 Environmental Protection Agency's and the United States Department  
287 of Energy's Energy Star program; The United States' Department of  
288 Energy's federal Energy Management program; the National Electrical  
289 Manufacturers' Association standard TP-1 standards set by the  
290 Consortium for Energy Efficiency based in Boston, Massachusetts and  
291 the California Energy Commission's Title 20 standards. Such efficiency  
292 standards, where in conflict with the State Building Code, shall take  
293 precedence over the standards contained in the Building Code. [After  
294 July 1, 1988,] Not later than July 1, 2005, and biennially thereafter, the  
295 secretary, in consultation with the commissioner, [may] shall review  
296 and increase the level of such efficiency standards upon a  
297 determination that increased efficiency standards would serve to  
298 promote energy conservation in the state and would be cost-effective  
299 for consumers who purchase and use such new [appliances] products,  
300 provided no such increased efficiency standards shall become effective  
301 within one year following the adoption of any amended regulations  
302 providing for such increased efficiency standards. The secretary, in  
303 consultation with the commissioner, may adopt regulations that  
304 establish efficiency standards for products not specifically listed in  
305 subsection (b) of this section. The secretary, in consultation with the  
306 commissioner, may adopt such further regulations as necessary to

307 implement the provisions of this section.

308 (e) On or after July 1, [1988] 2004, no new [appliance] product of a  
309 type set forth in subsection (b) of this section may be sold, offered for  
310 sale, or installed in the state unless the energy efficiency of the new  
311 [appliance] product meets or exceeds the efficiency standards set forth  
312 in such regulations adopted pursuant to subsection (d) of this section.

313 (f) The commissioner, in consultation with the secretary, shall adopt  
314 procedures for testing the energy efficiency of the new [appliances]  
315 products covered by subsection (b) of this section if such procedures  
316 are not provided for in the State Building Code. The commissioner  
317 shall use United States Department of Energy approved test methods,  
318 or in the absence of such test methods, other appropriate nationally  
319 recognized test methods. The manufacturers of such [appliances]  
320 products shall cause samples of such [appliances] products to be tested  
321 in accordance with the test procedures adopted pursuant to this  
322 subsection or those specified in the State Building Code.

323 (g) Manufacturers of new [appliances] products covered by  
324 subsection (b) of this section shall certify to the commissioner that such  
325 [appliances] products are in compliance with the provisions of this  
326 section. The commissioner, in consultation with the secretary, shall  
327 promulgate regulations governing the certification of such [appliances]  
328 products and shall publish an annual list of such [appliances]  
329 products.

330 (h) The commissioner shall cause periodic inspections to be made of  
331 distributors or retailers of new [appliances] products covered by  
332 subsection (b) of this section in order to determine compliance with the  
333 provisions of this section. The commissioner shall cause investigations  
334 to be made of complaints received concerning violations of this section  
335 and shall report the results of such investigations to the Attorney  
336 General. The Attorney General may institute proceedings to enforce  
337 the provisions of this section. Any person who violates any provision  
338 of this section shall be subject to a civil penalty of not more than two  
339 hundred fifty dollars. Each violation of this section shall constitute a

340 separate offense, and each day that such violation continues shall  
341 constitute a separate offense.

342 Sec. 3. Subsection (e) of section 4a-57 of the general statutes is  
343 repealed and the following is substituted in lieu thereof (*Effective*  
344 *October 1, 2002*):

345 (e) (1) The purchase of or contract for the following public utility  
346 services shall not be subject to competitive bidding or competitive  
347 negotiation: (A) Electric distribution services; (B) water services; (C)  
348 gas distribution services; (D) electric generation services [until the date  
349 such services are competitive pursuant to the schedule set forth in  
350 section 16-244b, provided electric generation services shall be exempt  
351 from competitive bidding and competitive negotiation after said date]  
352 if such services are provided by an electric municipal utility other than  
353 by a participating electric municipal utility, as defined in section 16-1,  
354 in the service area of said electric municipal utility; and (E) gas supply  
355 services until the date such services are competitive pursuant to  
356 legislative act or order of the Department of Public Utility Control,  
357 provided gas supply services shall be exempt from competitive  
358 bidding and competitive negotiation after said date if such services are  
359 provided by a gas municipal utility in the service area of said gas  
360 municipal utility.

361 (2) Any purchase of or contract by the department for electric  
362 generation services that are subject to competitive bidding and  
363 competitive negotiations shall be conducted in cooperation with the  
364 Office of Policy and Management pursuant to section 16a-14e. The  
365 department and the Office of Policy and Management may encourage  
366 the purchase of electricity generated from Class I and Class II  
367 renewable energy sources, as defined in section 16-1, as amended.

This act shall take effect as follows:	
Section 1	<i>July 1, 2002</i>
Sec. 2	<i>July 1, 2002</i>
Sec. 3	<i>October 1, 2002</i>

**ET**      *Joint Favorable Subst. C/R*

GAE

**GAE**      *Joint Favorable*

The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either House thereof for any purpose:

### **OFA Fiscal Note**

#### **State Impact:**

<b>Fund-Type</b>	<b>Agency Affected</b>	<b>FY 03 \$</b>	<b>Future FY</b>
GF - Cost	Consumer Protection, Dept.	79,617	90,000
GF - Cost	Policy & Mgmt., Off.; Pub. Works, Dept.	Minimal	Minimal
GF - Cost	Treasurer, Debt Serv.	Potential Significant	Potential Significant
TF - Cost	Treasurer, Debt Serv.	Potential Significant	Potential Significant
GF - Savings	Pub. Works, Dept.; Judicial Dept.; UConn	None	Potential Significant
TF - Savings	Transportation, Dept.; Motor Vehicle Dept.	None	Potential Significant
GF - Cost	Econ. & Com. Development, Dept.	None	Potential Significant

Note: GF=General Fund; TF=Transportation Fund

**Municipal Impact:** None

#### **Explanation**

This bill expands the types of products subject to energy efficiency standards. These standards are to be established by the Office of Policy and Management (OPM) and the Department of Consumer Protection (DCP). The bill also requires the Commissioner of Consumer Protection: 1) to cause periodic inspections of distributors or retailers of new products to determine compliance, 2) to investigate complaints received concerning violations and to report the findings to the Attorney General and 3) to promulgate regulations.

The Department of Consumer Protection would necessitate the resources of at least one (1) additional inspector; such costs are broken down as follows:

	FY 03	FY 04
Personal Services	\$ 47,568	\$ 49,709
Fringe Benefits <sup>1</sup>	20,454	29,249
Other Expenses	7,240	7,457
Equipment	4,355	4,485
<b>Total</b>	<b>\$ 79,617</b>	<b>\$ 90,900</b>

The regulations can be promulgated by DCP staff within normal duties and responsibilities, and OPM can provide assistance as necessary within their current budgetary resources.

The bill requires the Commissioner of the Department of Public Works (DPW) to adopt regulations that would require all new construction to meet or exceed the standards as established by the United States Green Building Council. Currently, DPW has one staff member dedicated to building life cycle analysis. The agency also has the equivalent of 2 ½ positions dedicated to their energy conservation program. DPW estimates that the costs of construction could increase by up to 5%, while the Department of Transportation estimates that the costs for many of their maintenance facilities could increase by 10% or more.

These additional construction costs could be offset by savings in the operations of the new buildings over their lifetime, especially in heating and ventilation costs. These savings are estimated by DPW as up to 30% of annual utility costs.

The bill allows OPM, in consultation with DPW to exempt any buildings from these new standards when the cost of compliance significantly outweighs the benefits. Therefore, it is anticipated that these additional construction costs will only be incurred when they exceeded by operational savings over the life of the building. DPW is anticipated to incur minimal costs from adopting regulations and updating such regulations as necessary. Both DPW and OPM are

anticipated to incur minimal costs from their cost/benefit analysis of new construction projects.

It is anticipated that the Secretary of the Office of Policy and Management and the Commissioner of Economic and Community Development can establish energy efficiency standards for certain housing projects within the current budgetary resources of each agency, thus there is no fiscal impact. To the extent these standards increase the construction cost for state owned or state-financed housing projects future costs may be incurred.

Finally, permitting DPW and OPM encourage state agencies to purchase electricity from certain renewable energy resources results in no fiscal impact to these agencies.

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<sup>1</sup> Fringe benefit costs are not included in the agency's operational budget. Instead, they are part of funds appropriated for this purpose under Miscellaneous Appropriations Administered by the Comptroller.



**OLR Bill Analysis**

sSB 341

**AN ACT CONCERNING ENERGY EFFICIENCY****SUMMARY:**

This bill requires the Office of Policy and Management (OPM) secretary and the consumer protection (DCP) commissioner to adopt regulations establishing energy efficiency standards for a wide range of products. It requires that these standards, and the standards that already apply to showerheads and certain lighting fixtures, be at least as stringent as those specified under the federal Energy Star program and similar initiatives.

By law, the OPM secretary and public works commissioner must establish energy efficiency standards for existing and new state-owned or leased buildings. Under current law, the standards must require the maximum efficiency of energy use in the buildings. The bill limits this provision by requiring that the benefits of the efficiency outweigh its costs, as determined by the officials. Under the bill, the officials must require all affected buildings to meet or exceed the silver standard of the Leadership in Energy and Environmental Design's (LEED) rating system for new construction, as revised, or a similar standard the officials adopted by regulation. The United States Green Building Council, a nonprofit organization, has established the LEED system, which addresses energy efficiency, renewable energy use, and indoor air quality.

By law, the secretary and the economic and community development commissioner must establish energy efficiency standards for new state-owned and -financed housing projects. Under the bill, they must require that these projects meet the LEED silver standard, as revised.

The bill explicitly allows the Department of Public Works and OPM to encourage state agencies to purchase electricity from certain renewable energy resources, such as wind, solar energy, fuel cells, and trash-to-energy plants.

**EFFECTIVE DATE:** October 1, 2002 for the renewable energy purchasing provision; July 1, 2002 for the other provisions.

## **ENERGY EFFICIENCY STANDARDS FOR PRODUCTS**

The law required the OPM secretary and DCP commissioner to adopt regulations by July 1, 1988 establishing energy efficiency standards for showerheads and certain lighting products, such as fluorescent lamps. The standards apply to products sold, offered for sale, or installed for the first time.

### ***Products Covered***

The bill requires the officials to adopt the standards by July 1, 2003, for:

1. torchiere lighting fixtures (portable fixtures that provide indirect illumination by reflecting light upward off a bowl);
2. unit heaters, other than warm air furnaces as defined by federal law, that include a heating source and circulating fan, enclosed in a common casing;
3. electrical transformers that have an input voltage of 600 volts or less and that are air rather than oil-cooled;
4. refrigerated beverage vending machines;
5. traffic signal modules;
6. illuminated exit signs;
7. automatic commercial ice makers;
8. packaged air-conditioning equipment with more than 20 tons of cooling capacity;
9. commercially available set-top boxes, such as those that handle electronic signals and send them to a television for viewing or to a computer for processing; and
10. commercial clothes washers, such as those used in apartment buildings or coin laundries.

The standards must require that commercial unit heaters have either power venting or an automatic flue and prohibit them from having pilot lights. The secretary, in consultation with the commissioner, may adopt regulations for other products.

### ***Relationship to Other Standards***

The regulatory standards must be at least as stringent as applicable provisions of the following programs and standards as of January 1, 2002:

1. the federal Energy Star program;
2. the U.S. Department of Energy's federal energy management program;
3. the National Electrical Manufacturers' Association TP-1 standards, as developed by the Consortium for Energy Efficiency; and
4. the California Energy Commission's Title 20 standards.

This provision also applies to the standards for showerheads and lighting fixtures. By law, the efficiency standards in the regulations supersede conflicting provisions in the state building code.

The bill bars, starting July 1, 2004, the sale, offering for sale, or installation of these products that do not at least meet the efficiency standards.

### ***Increasing Standards***

Under current law, the secretary, in consultation with the DCP commissioner, can increase energy efficiency standards so long as the more stringent standard (1) promotes energy conservation, (2) is cost-effective for consumers who buy and use the products, and (3) does not take effect for at least one year after it is adopted. The bill requires the officials to increase standards by July 1, 2005 and every two years thereafter, subject to the same conditions.

The bill extends to the above products requirements that already apply to the showerheads and lighting products with regard to (1) procedures for testing the energy efficiency of products, (2) certification by manufacturers of the energy efficiency of their products, and (3) requirements for DCP inspections to ensure that product distributors and retailers comply with the standards.

### ***Penalty***

By law, violation of the standards and related provisions is punishable by a civil penalty of up to \$250 per offense per day. The law does not apply to products (1) manufactured in Connecticut for sale out of state, (2) manufactured in state but sold at wholesale for retail sale out of state, (3) installed in mobile homes when they are built, and (4) designed expressly for installation and use in recreational vehicles.

**BACKGROUND*****Related Bill***

sHB 5711, “An Act Concerning Green Building Standards,” reported favorably the Environment Committee, has similar provisions regarding building energy efficiency standards.

**COMMITTEE ACTION**

Energy and Technology Committee

Joint Favorable Substitute Change of Reference

Yea 15      Nay 0

Government Administration and Elections Committee

Joint Favorable Report

Yea 19      Nay 0